From: Hagedorn, Nicholas <nhagedorn@hawthornegc.com>

Sent: Friday, March 11, 2022 10:47 AM **To:** DES SBCC <sbcc@des.wa.gov>

Subject: Hawthorne Gardening Company Comments C405.3—Lighting for plant growth and

maintenance.

External Email

Washington State Building Council Comments

From Nicholas Hagedorn, Submitted March 11, 2021

Washington State Building Code Council

PO box 41449

Olympia, WA 98504-1449

RE: C405.3—Lighting for plant growth and maintenance.

To Whom It May Concern:

On behalf of The Scotts Miracle-Gro Company and its subsidiary The Hawthorne Gardening Company please find comments on "Plant light efficacy" (C405.3). The Scotts Miracle-Gro Company is the largest manufacturer of consumer lawn and garden supplies, and The Hawthorne Gardening Company is North America's largest distributor of hydroponic products and manufactures nutrients, plant supplements, growing media, climate control equipment, durables, and lighting for cultivators. Hawthorne also distributes thousands of other products used by cultivators in the operation of their growing environments.

Here at Hawthorne we are a sustainability-focused group of highly motivated individuals, eager to share our love of cultivation with the world. We applaud your organization's efforts to increase energy efficiency and are partners in this endeavor. As a leading manufacturer of lighting used around the world in plant cultivation, we have experts in not only lighting and energy but also plant biology to help standard originations and regulators understand how proposed standards can impact plants and building operations. Our most recent innovations, the Gavita 1700e LED and CT 1930e, are examples of how we are helping to empower growers to be more energy efficient through innovation. Annually we are spending millions of dollars in research and development to bring innovations that lead on sustainability issues like energy efficiency to cultivators.

We encourage the team developing these standards to address an issue that will negatively impact indoor cultivation operations and our efforts to help transform energy efficiency within this industry.

Indoor Lighting Standard

Issue to Address

We agree with the Washington State building council that the (PPE) standard of 1.9 µmol/J is an acceptable strategy to create market transformation to more energy efficient lighting in the Controlled Environment Horticulture industry. Our concern is that the vague language used to express this will leave things open to interpretation by both regulators and cultivators which may negatively impact WA States goal of decreased carbon emissions in addition to potentially damaging the vulnerable WA cannabis industry.

There are several ways to measure the efficacy of an indoor horticulture light, it is our belief that all parties would benefit from concise language that explicitly dictates this measurement is taken at the lamp level. If measured at the fixture level many of the most efficient and popular light's (eEfficient double-e ended high pressure sodium can approach 2.0 PPE at the lamp level) cultivators commonly use could potentially be non compliant, forcing cultivators to choose between entering (or re-entering) the illicitblack market, or making exorbitantly expensive renovations without the help of utility efficiency incentives.

Suggested Resolution

C405.3 Lighting for plant growth and maintenance. All permanently installed luminaires used for plant growth and maintenance shall have a photosynthetic photon efficacy of not less than 1.7 μ mol/J for greenhouses and not less than 1.9 μ mol/J for all other indoor growing spaces as defined in accordance with ANSI/ASABE S640.

We suggest that the following revision the proposed language in C405.3: All permanently installed luminaires used for plant growth and maintenance shall have a photosynthetic photon efficacy of not less than 1.7 μ mol/J for greenhouses and not less than 1.9 μ mol/J measured at the lamp level where luminaires have serviceable lamps for all other indoor growing spaces

This will allow utility companies to use that as a baseline for growers willing to switch to LED's, and to allow indoor cultivators the choice between two more efficient technologies on the market (LED and the current industry standard efficient double ended high pressure sodium lamps). We are worried about the financial burden that the proposed standard could place on legal cannabis cultivators and other controlled environment agricultural operators. This solution would allow the industry to eliminate the least energy efficient lighting while continuing to allow the market to support a smoother transition for growers and manufacturers to the more efficient lighting technologies.

Thank you for your time and attention to this matter. Please feel free to contact us with any questions.

Sincerely,

Nicholas Hagedorn

Senior Analyst, Government Relations & Category Management



Nicholas Hagedorn | Senior Analyst, Government Relations

P:516-589-4395 E:Nhagedorn@hawthornegc.com

Hawthornegc.com | Hawthornegc.ca